FILE 'USPAT' ENTERED AT 16:54:36 ON 08 JUL 1998

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*              W E L C O M E   T O   T H E               *
*          U. S.   P A T E N T   T E X T   F I L E       *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

=> s document processing system

```
        51074 DOCUMENT
       464803 PROCESSING
      1096951 SYSTEM
L1        302 DOCUMENT PROCESSING SYSTEM
              (DOCUMENT(W)PROCESSING(W)SYSTEM)
```

=> s l1 and folders or folder

```
         2244 FOLDERS
         4697 FOLDER
L2       4697 L1 AND FOLDERS OR FOLDER
```

=> s l2 and candidate

```
        14950 CANDIDATE
L3         42 L2 AND CANDIDATE
```

=> s l3 and 395/600/ccls or 395/2/ccls or 364/200/ccls

```
            0 395/600/CCLS
            0 395/2/CCLS
            1 364/200/CCLS
L4          1 L3 AND 395/600/CCLS OR 395/2/CCLS OR 364/200/CCLS
```

=> d l4 hit

TEXT DATA FOR PATENT 4,964,041 IS NOT AVAILABLE, SEE THE MICROFILE OR
PAPER INSTEAD

=> s l3 and 364/200/ccls

```
            1 364/200/CCLS
L5          0 L3 AND 364/200/CCLS
```

=> d l3 1-42

1. 5,745,896, Apr. 28, 1998, Referential integrity in a relational
database management system; Narayanan Vijaykumar, 707/100, 1, 4 [IMAGE
AVAILABLE]

2. 5,742,508, Apr. 21, 1998, Air control supporting system; Yoichi
Kusui, et al., 701/120; 73/178T; 342/36; 395/500, 670, 676 [IMAGE
AVAILABLE]

```
=> s indexing subsystem

        29774  INDEXING
        16446  SUBSYSTEM
L5          5  INDEXING SUBSYSTEM
                  (INDEXING(W)SUBSYSTEM)

=> d hit
```

US PAT NO: 5,619,995 [IMAGE AVAILABLE]   L5: 1 of 5

SUMMARY:

BSUM(50)

 The image **indexing subsystem** may be used by itself and each of
the subsystems may also be used with other digital motion video image
implementations such as uncompressed digital video.

```
=> s metadata table

            98  METADATA
        523173  TABLE
L11          3  METADATA TABLE
                   (METADATA(W)TABLE)

=> d l11 hit
```

US PAT NO: 5,721,911 [IMAGE AVAILABLE]   L11: 1 of 3

DETDESC:

DETD(15)

 Another example would be two **metadata table** objects which are
derived from the same source. Given a set of data, for example, a
financial ledger system, two data tables could be derived from this
information. Two **metadata table** objects could be used to describe
both tables and their derivations. These **metadata table** objects
could be linked together to show a peer-to-peer relationship (both
derived from the same source).

```
=> s index (P) managed files

        150757 INDEX
          9720 MANAGED
         17410 FILES
            12 MANAGED FILES
                  (MANAGED(W)FILES)
L12        10 INDEX (P) MANAGED FILES

=> d 1-10
```

1. 5,727,061, Mar. 10, 1998, Personal access management systems; William Cedric Johnson, et al., 380/25, 4, 23 [IMAGE AVAILABLE]

2. 5,696,825, Dec. 9, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]

3. 5,694,472; Dec. 2, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]

4. 5,692,049, Nov. 25, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4 [IMAGE AVAILABLE]

5. 5,689,564, Nov. 18, 1997, Personal access management system; William Cedric Johnson, et al., 380/25, 4, 23 [IMAGE AVAILABLE]

6. 5,682,428, Oct. 28, 1997, Personal access management system; William Cedric Johnson, 380/23, 3, 4, 25 [IMAGE AVAILABLE]

7. 5,644,710, Jul. 1, 1997, Personal access management system; William Cedric Johnson, et al., 395/186, 188.01 [IMAGE AVAILABLE]

8. 5,619,574, Apr. 8, 1997, Personal access management system; William C. Johnson, et al., 380/25; 364/969, DIG.1, DIG.2; 380/23 [IMAGE AVAILABLE]

9. 5,610,980, Mar. 11, 1997, Method and apparatus for re-initializing a processing device and a storage device; William C. Johnson, et al., 380/4, 21, 25, 48 [IMAGE AVAILABLE]

10. 5,604,800, Feb. 18, 1997, Personal access management system; William C. Johnson, et al., 380/4; 38/3, 23, 25, 49 [IMAGE AVAILABLE]

```
=> d hit
```

US PAT NO: 5,727,061 [IMAGE AVAILABLE]   L12: 1 of 10

DETDESC:

DETD(133)

FIG. 7d provides a more detailed flow diagram for process 192. Preferably, processor 30 performs the file management function by first selecting 270 one of the **managed files** 154-164, 170, and then retrieving 270 from table 370 the operational key file name and the file identification code corresponding to the chosen file. Processor 30 then uses the operational key file name as an **index** to retrieve 272 from

section 1160 of ⬤e RAM 40 the operational key c   corresponding to the operational key ⬤.e⬤me. If this operational k   il⬤me is not found in the RAM 40, then ⬤most likely means that the EKE ⬤s interacting with an improper UAS (i.e. a UAS other than the principal UAS). In such a case, processor 30 preferably halts operation.

```
> s attribute storage (p) database

        12501 ATTRIBUTE
       390912 STORAGE
           54 ATTRIBUTE STORAGE
              (ATTRIBUTE(W)STORAGE)
        12065 DATABASE
L13         5 ATTRIBUTE STORAGE (P) DATABASE

=> d 1-5


1.  5,561,796, Oct. 1, 1996, Apparatus for searching for speech and
moving images; Kenji Sakamoto, et al., 707/3; 364/282.1, 282.3, DIG.1;
386/96 [IMAGE AVAILABLE]

2.  5,230,073, Jul. 20, 1993, System and method for accessing and
updating a continuously broadcasted stored database; Eric J. Gausmann, et
al., 707/3; 364/228.1, 260, 271, 282.1, DIG.1 [IMAGE AVAILABLE]

3.  4,888,690, Dec. 19, 1989, Interactive error handling means in
database management; Val J. Huber, 707/4; 364/234, 234.3, 236.8, 237.2,
237.3, 237.8, 237.81, 243, 243.2, 246, 246.3, 264, 264.1, 280, 280.9,
282.1, 282.3, 283.4, 285, 286, 286.1, 286.2, DIG.1; 395/185.1 [IMAGE
AVAILABLE]

4.  4,805,099, Feb. 14, 1989, Retrieval of related records from a
relational database; Val J. Huber, 707/102; 364/222.81, 225.4, 234,
234.3, 236.8, 237.2, 237.3, 237.8, 237.81, 243, 243.2, 246, 246.3, 280,
280.9, 282.1, 283.3, 283.4, 286, 286.1, 963, DIG.1 [IMAGE AVAILABLE]

5.  4,791,561, Dec. 13, 1988, Interactive construction of means for
database maintenance; Val J. Huber, 707/1; 364/222.81, 222.82, 228.4,
234, 234.2, 236.8, 237.2, 282.1, 283.4, 286, 286.1, 286.2, 963, DIG.1
[IMAGE AVAILABLE]

=> d hit
```

US PAT NO: 5,561,796 [IMAGE AVAILABLE]   L13: 1 of 5

ABSTRACT:
A speech and moving image search apparatus includes an input section for
inputting a command and a label information storage device for storing
label information. A label **attribute storage** device is further
included for storing label attributes, as well as a broader term storage
device for storing broader terms of labels. A first search section
extracts information on the data from the label information storage
device. A **database** is also included for storing speech and moving
images. A control section thereafter accesses desired data in the
database based on the information extracted by the first search
section. Finally, an output section is included for outputting the data.

SUMMARY:

BSUM(12)

 According to the present invention, the above and other objects can be
attained by a speech and moving image search apparatus comprising a

```
=> s relational database and file storage

              2642  RELATIONAL
            12065  DATABASE
              836  RELATIONAL DATABASE
                    (RELATIONAL(W)DATABASE)
            39228  FILE
           390912  STORAGE
              821  FILE STORAGE
                    (FILE(W)STORAGE)
L19          31  RELATIONAL DATABASE AND FILE STORAGE

=> d 1-31
```

1. 5,732,216, Mar. 24, 1998, Audio message exchange system; James Logan, et al., 395/200.33; 348/7, 13 [IMAGE AVAILABLE]

2. 5,726,883, Mar. 10, 1998, Method of customizing control interfaces for devices on a network; Jonathan D. Levine, et al., 364/188; 345/335, 349, 357, 970 [IMAGE AVAILABLE]

3. 5,721,827, Feb. 24, 1998, System for electrically distributing personalized information; James Logan, et al., 395/200.47; 348/13 [IMAGE AVAILABLE]

4. 5,717,951, Feb. 10, 1998, Method for storing and retrieving information on a magnetic storage medium via data blocks of variable sizes; Kan W. Yabumoto, 395/831 [IMAGE AVAILABLE]

5. 5,717,925, Feb. 10, 1998, Information catalog system with object-dependent functionality; Lloyd Harper, et al., 1/1 [IMAGE AVAILABLE]

6. 5,717,439, Feb. 10, 1998, Hierarchy of saving and retrieving control templates; Jonathan D. Levine, et al., 345/353 [IMAGE AVAILABLE]

7. 5,689,642, Nov. 18, 1997, Recipient prioritized communication channel profiles; Larry E. Harkins, et al., 395/200.37, 200.59 [IMAGE AVAILABLE]

8. 5,678,046, Oct. 14, 1997, Method and apparatus for distributing files on a **file storage** device; Thomas Cahill, et al., 1/1; 705/30; 707/1, 9, 10 [IMAGE AVAILABLE]

9. 5,678,042, Oct. 14, 1997, Network management system having historical virtual catalog snapshots for overview of historical changes to files distributively stored across network domain; Thomas Pisello, et al., 395/184.01, 200.54, 280; 707/7 [IMAGE AVAILABLE]

10. 5,657,461, Aug. 12, 1997, User interface for defining and automatically transmitting data according to preferred communication channels; Larry E. Harkins, et al., 345/333 [IMAGE AVAILABLE]

11. 5,630,122, May 13, 1997, Computerized report-based interactive database query interface; Craig A. Kaplan, et al., 707/4; 364/DIG.1 [IMAGE AVAILABLE]

12. 5,630,079, May 13, 1997, Document job key to tailor multifunctional user interfaces; Denise C. McLaughlin, 345/335, 333, 339, 347; 707/500